

Male: length  $11\frac{1}{2}$ , wing 6 inches. Female: length 13, wing 6·5, tail 3·2 inches.

The female has whitish eyebrows meeting at the occiput; her cheeks and throat are whitish; her neck all round and upper breast are beautifully waved with blackish brown; her upper parts are liver-brown, with a faint sheen of purple or or green according to the fall of light; her upper tail-coverts are lighter and mottled; her secondary coverts are lightly tipped with whitish; her secondaries broadly tipped, her tertiaries edged, and a few of her inner primaries marked near their tips with whitish; her tail is coloured as her back; and her underparts are dingy white, the feathers being brownish at their hidden portions; axillaries and underwings light liver-brown. The soft parts I will leave till I get fresh specimens; they have changed much in colour in the dry skins before me. The birds were extremely fat.

### III.—*On Berardius and other Ziphioid Whales.*

By Dr. J. E. GRAY, F.R.S. &c.

PROFESSOR FLOWER has given an admirable description and figures of the skeleton of *Berardius Arnouxi* sent to England by Dr. Haast and purchased for the Museum of the Royal College of Surgeons. It is very pleasant to see these excellent and beautifully illustrated essays on the skeleton of Cetacea, which Professor Flower is now publishing in the 'Transactions of the Zoological Society.'

Professor Flower makes some observations on the other ziphioid whales.

I. He observes that the small skull in the Museum at Wellington, described and figured in the 'Trans. New-Zeal. Inst.' as the young of the *Berardius Arnouxi*, and which I have called *Berardius Hectori*, belongs to a different section of the group (Trans. Z. S. vol. viii. p. 216)—which must be stated on the authority of Dr. Hector's figure, for the skull has not been seen in Europe; and he speaks of it under the genus *Mesoplodon*, observing ("from the conformation of the skull") that the position of the teeth on the side of the jaw is of "little importance as a generic character." I think zoologists will prefer to take their characters from the position of the teeth rather than from a small modification in the form of the bones of which the skull is composed, which no doubt varies more or less in every species. At any rate, this is either a *Berardius* with the bones of which the skull is composed more like in shape to those of the skull of *Mesoplodon*, or a *Mesoplodon* with the teeth of a *Berardius*.

It makes very little difference which we choose; perhaps some day it will be a genus; but zoologists and comparative anatomists, or rather osteologists, look at these things with very different eyes: the one only knows the structure of a very limited number of animals; and the other has to arrange and classify all that come under his or others' observation.

I always understood the name *Mesodon* or *Mesoplodon* was given to the genus because the teeth were more or less in the middle of the side of the jaw, which is the case in all the species; but if *Berardius Hectori* be referred to it, this species will be the ziphioid whale with the teeth in the middle of the side of the jaw, with its teeth at the end of the jaw. To be sure there are examples of such nomenclature as *Chrysanthemum* (the golden flower) *leucanthemum* (with white flowers); but it is quoted as an example to be avoided.

II. Speaking of *Petrorhynchus capensis*, he observes:—"A skull of this animal has been brought from the Cape of Good Hope, of which an excellent description has been published by Professor van Beneden, under the name of *Ziphius indicus*;" and he goes on to complain that I retain the name of *Petrorhynchus capensis*, "although its specific identity with the last-named previously described specimen is admitted" by myself.

However good may be M. van Beneden's "description," his figure is most inaccurate, both in form, proportion, and detail; and I could not have believed that it belonged to the same species, or, scarcely, genus, until M. van Beneden sent me a cast of the beak of his specimen. I do not see how we can use the name *indicus* for a species which has only been found in the seas around the Cape of Good Hope. The Indian zoologists object to our giving the name of India to the whole of Hindostan; but what would they say if we used *indicus* for a species only found in Africa? I believe that the name *indicus* was given under the belief that it was not a native of Africa, but only "brought from the Cape" as an *entrepôt*. I have a further objection: I am informed that in the Indian seas a species of the genus is found which, from the description I have received of it, is distinct.

Professor Flower says that the skeleton of the "*Hyperoodon de Corse*" of Doumet is preserved at Cette, and that the skull is figured by M. Gervais in the '*Ostéographie des Cétacés*,' t. 21. f. 8, 9, which certainly is called "*Ziphius de Corse*;" but I was not quite sure that they were from M. Doumet's specimen. Mr. Flower, I suppose, has private information on this head from M. Gervais, as M. Gervais's text of these plates has not been published yet.

I also observe that Duvernoy gave the name of "*Hyperoodon Gervaisii*" and Fischer's "*Ziphius Gervaisii*" to the skull in the Paris Museum, from the Hérault, which I proposed, in the 'Annals,' 1872, x. p. 469, should be called *Epiodon Heraultii*, but which I gladly change to that of *Epiodon Gervaisii*. I see Professor Flower erroneously refers to 'Ostéogr. Cét.' t. 21. f. 1-6 for this specimen; it should be f. 1-4.

Mr. Krefft, some time ago, sent me a photograph of the skeleton of a ziphioid whale which is in the Museum of Sydney, and was obtained from an animal stranded in Little Bay, about six miles from Sydney, which he marked as *Mesoplodon longirostris*, Krefft. It appears to be, from the scale appended, 18 feet long. The angle and symphysis of the lower jaw appears to be rather elongate and attenuated in front; and the beak is about twice and a half the length of the brain-cavity, measuring from the notch; and the head is one fifth of the entire length. The photograph does not show any teeth; and the skull resembles that of the figure of *Berardius Hectori*; but the beak is rather longer in proportion to the size of the head.

In the 'Annals and Magazine of Natural History, 1871,' vii. p. 368, I published a note which I had received and the figure from the photograph of a tooth which Mr. Krefft sent to me, as "the photograph of the tooth of a new whale, 18 feet long, caught in Little Bay. It is allied to the genus *Mesoplodon*; and I propose to call it *Mesoplodon Güntheri*." He says, "We have the entire skeleton;" so that there can be no doubt of its being the same as the one he named, but did not describe or publish, as *Mesoplodon longirostris*, which Professor Flower thinks is closely allied to, if not identical with, *Ziphius Layardi*. The form and surface of the tooth which is figured from Mr. Krefft's photograph appeared to me so unlike that of any other ziphioid whale known that I regarded it as indicating a new genus, which I proposed to call *Callidon*.

Dr. Krefft explains that the tooth is not visible from without; it is imbedded in the mandible, and the tip is bent towards the margin. It is as unlike the strap-shaped tooth of *Ziphius Layardi* as it is possible to be; and as *longirostris* has not been published, I propose to call it *Callidon Güntheri*.

The skeleton seems, from the photograph, to be one of the most perfect known.